

VGEN.P-056  
PATENT APPLICATION

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Darasch et al.

Serial No.: 09/536,111

Examiner: L. Clow

Filed: March 24, 2000

For: Method for Alignment of DNA Sequences with Increased Read-Length and Accuracy

FAX RECEIVED

RESPONSE TO FINAL REJECTION

MAR 27 2003

Asst. Commissioner for Patents

Washington, D.C. 20231

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Sir:

This is in response to the final rejection mailed September 26, 2002 for the above-captioned application. Reconsideration of the application and allowance of all claims in view of the remarks herein are respectfully requested.

Claims 1-22 are pending in this application.

Claim 1 is an independent claims directed to method for assignment of base numbers to peaks within one or more experimental DNA sequencing data traces derived from the separation of experimental DNA sequencing fragments. In this method, one performs an analysis on reference data traces for a polynucleotide having a known sequence. The observed peaks in this reference data trace are used to define a corrected time scale which tells the user where peaks should occur under the experimental conditions of the separation. One then uses this time scale as a guide to know where to look in an experimental data trace for peaks, and assigns a base number to each peak found in the experimental DNA sequencing data trace(s) based upon the corrected time scale.

I hereby certify that this paper is being sent by facsimile transmittal to the United States Patent Office at 703-872-9307 on March 26, 2003.

Marina T. Larson  
Marina T. Larson, PTO Reg. No. 32,038

March 26, 2003  
Date of Signature